

Science Toolkit: Grade 5 Objective 1.C.1.a

Student Handout: Science: Grade 5 Objective 1.C.1.a

Standard 1.0 Skills and Processes

Topic C. Communicating Scientific Information

Indicator 1. Recognize that clear communication is an essential part of doing science because it enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.

Objective a. Make use of and analyze models, such as tables and graphs to summarize and interpret data.




Selected Response (SR) Item

Question

Use the information and table below to answer the following:

Carbon is a pure element that is able to form different materials. The table below compares three forms of carbon.

FORMS OF CARBON

Name of Material	Use	Physical Properties
Diamond 	Jewelry, drill bits	Color: clear, yellow, gray Hardness: hardest naturally occurring material
Coal 	Fuel	Color: black, brown Hardness: may range from soft to hard, depending on the percent of water it contains
Graphite 	Pencils, steel production	Color: shiny gray Hardness: soft, may be chipped with a fingernail

Some substances in coal make coal weak and breakable. The four main types of coal are listed below.

COAL

Type of Coal	Original Percent of Water (by mass)	Common United States Location
Anthracite	2–14	Pennsylvania
Bituminous	15–55	Kentucky, Pennsylvania, West Virginia
Lignite	65–75	Montana, North Dakota, Texas
Subbituminous	55–65	Alaska, Montana, Wyoming

Which type of coal is the strongest?

- A. anthracite
- B. bituminous
- C. lignite
- D. subbituminous

Correct Answer




A. anthracite

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